- 3. A pharmaceutical composition according to claim 2 5 further comprising one or more pharmaceutical excipients.
- 4. A pharmaceutical composition according to claim 3 further comprising a pharmaceutically acceptable preservative.
- **5**. A pharmaceutical composition according to claim **2**, 10 wherein said buffer is selected from the group consisting of acetate, citrate, and phosphate buffers.
- 6. A pharmaceutical composition according to claim 2 wherein said thickening agent is selected from the group consisting of methyl cellulose, xanthan gum, carboxymethyl 15 cellulose, hydroxypropyl cellulose, carbomer, and mixtures thereof.
- 7. A pharmaceutical composition according to claim 2 wherein said humectant is selected from the group consisting of sorbitol, propylene glycol, glycerol, and mixtures 20 thereof.
- 8. A pharmaceutical composition according to claim 2 wherein said surfactant is selected from the group consisting of polyoxyethylene derivatives and fatty acid partial esters of sorbitol anhydrides.
- 9. A pharmaceutical composition according to claim 2 wherein said surfactant is selected from the group consisting of sodium lauryl sulfate, Tween 80, Polyoxyl 40 Stearate, Polyoxy ethylene 50 Stearate, fusicates, bile salts, and Octoxynol.
- 10. A pharmaceutical composition according to claim 2 wherein said surfactant is selected from the group consisting of anionic, cationic, and nonionic surfactants.
- 11. A pharmaceutical composition according to claim 2 further comprising a bioadhesive.
- 12. A pharmaceutical composition according to claim 11 wherein said bioadhesive is selected from the group consisting of starches, polyvinyl alcohol, chitosans, gums, and acrylates.
- 13. A method of preventing and/or treating upper respiratory infections, in a mammal in need thereof comprising nasally delivering to the mammal an active agent consisting essentially of xylitol in a pharmaceutically acceptable carrier suitable for nasal delivery.

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- 14. A method according to claim 13 wherein said carrier comprises a buffer to maintain the pH of said composition, a pharmaceutically acceptable thickening agent, a humectant, and a pharmaceutically acceptable surfactant.
- 15. A method according to claim 14 further comprising one or more pharmaceutical excipients.
- **16.** A method according to claim **15** further comprising a pharmaceutically acceptable preservative.
- 17. A method according to claim 14 wherein said buffer is selected from the group consisting of acetate, citrate, and phosphate buffers.
- 18. A method according to claim 14 wherein said thickening agent is selected from the group consisting of methyl cellulose, xantham gum, carboxymethyl cellulose, hydroxypropyl cellulose, carbomer, and mixtures thereof.
- 19. A method according to claim 14 wherein said humectant is selected from the group consisting of sorbitol, propylene glycol, glycerol, and mixtures thereof.
- **20**. A method according to claim **14** wherein said surfactant is selected from the group consisting of polyoxyethylene derivatives and fatty acid partial esters of sorbitol anhydrides.
- 21. A method according to claim 14 wherein said surfactant is selected from the group consisting of sodium lauryl sulfate, Tween 80, Polyoxyl 40 Stearate, Polyoxy ethylene 50 Stearate, fusicates, bile salts, and Octoxynol.
  - 22. A method according to claim 14 wherein said surfactant is selected from the group of anionic, cationic, and nonionic surfactants.
  - 23. The method of claim 13 wherein the dosage rate of the medicament administered to a host is in the amount of from 1 mg to about 10 g.
  - 24. The method of claim 13 wherein the medicament contains concentrations of xylitol in the range of from about 0.001% to about 10% by weight.
  - 25. The method of claim 13 wherein the administration rate comprises administrating said medicament at a rate of about once daily to about 4 times per day.
  - **26.** A method according to claim **13** wherein said upper respiratory infection is otitis media.

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